Lee H. Sim, P.E.
Assistant State Engineer
1594 West Temple
Suite 220
Salt Lake City, Utah 84114-6300

May 25, 2005

Dear Mr. Sim;

In late December of last year I was contacted by Nelson Peterson of the Utah-Salt Lake Canal Co. for the purpose of inspecting the flow monitoring site on the canal at the Jordan Narrows. Nelson was seeking advice for possible improvements to enhance the accuracy of the gaging station and measuring section. I made several suggestions and Nelson told me he would meet with the canal board and do what he could over the winter.

On May 19, 2005 Nelson contacted me and informed me considerable work had been done and they were ready for a discharge measurement to determine the flow. I met with Nelson and the board at the monitoring site on May 24, 2005, to obtain the required measurement. Having seen this site before the improvements were made it was instantly clear that this company is determined to monitor the flow as accurately as possible. It is now a very impressive site. The outside staff (new and set to control zero) was reading 2.66 feet. The inside was reading 2.68 feet, and Nelson agreed it would need to be reset. The A-71 recorder was reading 2.67. I made the flow measurement between 1025-1115 and obtained a flow of 88.5 ft3/s. Using the old rating, a –0.51ft. correction was required. With the changes that have been made to the channel and control, I suggested to Nelson and the board members that a new rating should be created. Everyone agreed and as the opportunity arises for changes in flow, Nelson will contact me and flow measurements will be made to define a new rating. Obviously this will not happen immediately, but the hope is over the next 12-18 months the new rating can be developed.

I am enclosing a copy of the measurement, please contact me if you have questions regarding this site.

Respectfully,

Mike ReMillard, Hydrographer
Streamflow Technologies
P.O. Box 431
Kamas, Utah 84036
(435) 783-4411

cc: Nelson Peterson

9-275-F
(May 1971)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

WATER RESOURCES DIVISION

DISCHARGE MEASUREMENT NOTES

Meas. No. ____
Comp. by MdR
Checked by MdR

Sta. No. ____
Utah Salt Lake Canal
Date May 24 2025 Party Mike R. Millard
Width 22.6 Area 60.2 Vel. 1.47 G. H. 2.66 Disch. 88.5
Method .2 .8 No. secs. 24 G. H. change 0 in .80 hrs. Susp. Rod
Method coef. 1.0 Hor. angle coef. 1.0 Susp. coef. 1.0 Meter No. ____

GAGE READINGS

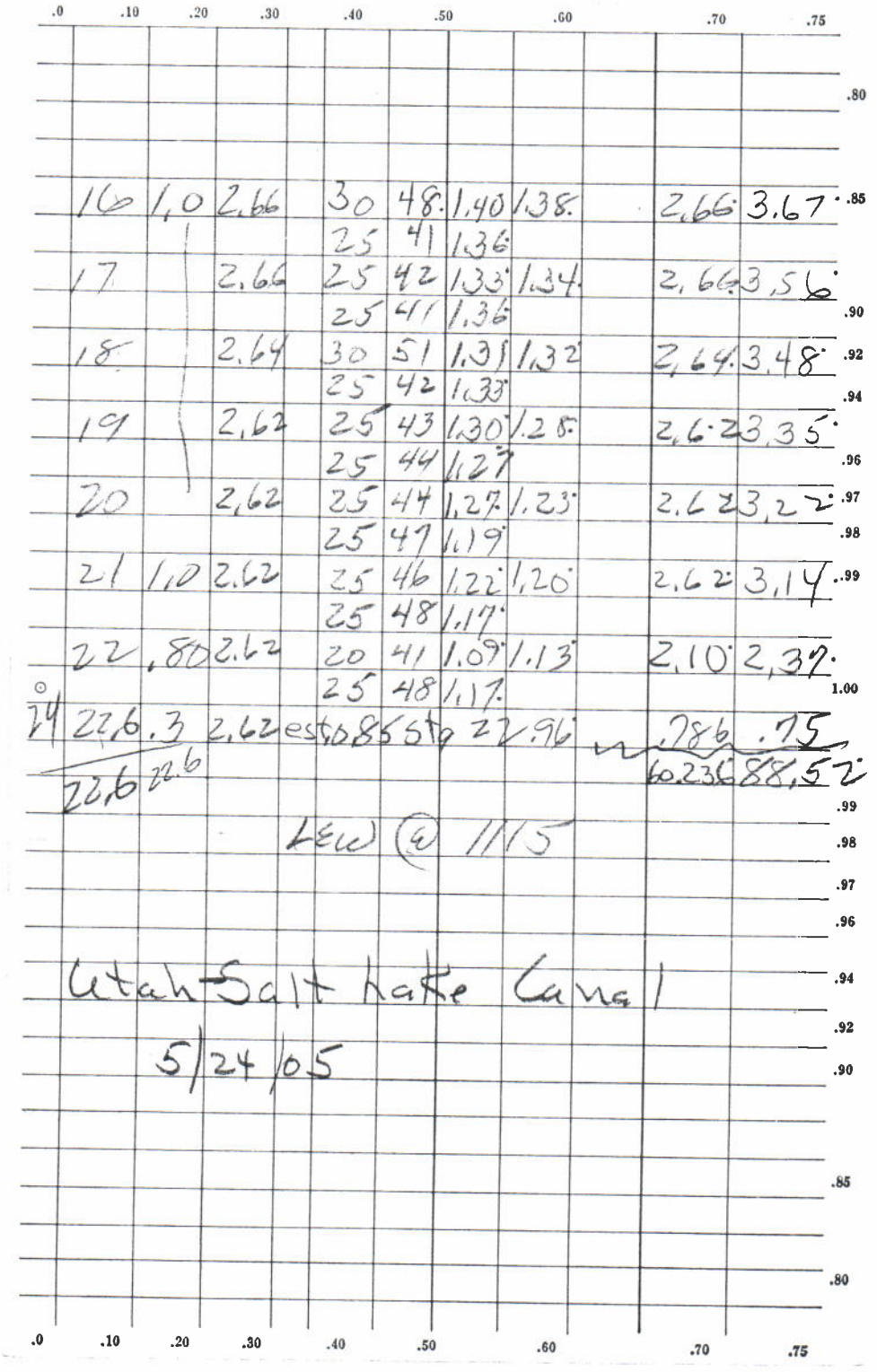
Time		Recorder	Inside	Outside
1015		2.67	2.68	2.66
1025	S			
1115	F			
1118		2.67	2.68	2.66
Weighted M. G. H.				2.66
G. H. correction				
Correct M. G. H.				

Type of meter Price AA
Date rated STD - 2 for rod, other.
Meter ____ ft. above bottom of weight.
Spin before meas. 4'11" after 5/23/05
Meas. plots ____ % diff. from rating ____
Wading, cable, ice, boat, upstr., downstr., side bridge @ ____ feet, mile, above, below gage, and ____
Check-bar, found ____
changed to ____ at ____
Correct ____
Levels obtained ____

Measurement rated excellent (2%), good (5%), fair (8%), poor (over 8%), based on following conditions: Cross section Concrete lined Canal
Flow Very Steady Weather prtly cldy - Warm
Other ____ Air ____ °F@ ____
Gage Operating OK Water ____ °F@ ____
Record removed NO Intake flushed ____
Observer ____
Control Channel
Remarks -.51 shift to old Rt. (1979)
Canal board members present.
Used OG as MGH as it has just recently
G. H. of zero flow 0.0 ft.
been installed and set to control 0.0

REW @ 1025 River at Lt. Sr. Canal 5/24/05

Angle coefficient	Dist. from initial point	Width	Depth	Observation depth	Revolutions	Time in seconds	VELOCITY: At point	VELOCITY: Mean in vertical	Adjusted for hor. angle or	Area	Discharge
	0	.5	2.70	est.	.8	55	sta	1.0	1.28	1.35	1.73
	1	1.0	2.70		30	45	1.49	1.50		2.7	4.05
					30	44	1.52				
	2		2.68		30	44	1.52	1.52		2.68	4.07
					30	44	1.52				
	3		2.68		30	41	1.63	1.65		2.68	4.42
					30	40	1.67				
	4		2.68		30	41	1.63	1.67		2.68	4.48
					40	52	1.71				
	5		2.68		30	41	1.63	1.67		2.68	4.48
					40	52	1.71				
	6		2.68		30	41	1.63	1.67		2.68	4.48
					40	52	1.71				
⊙	7		2.68		30	41	1.63	1.63		2.68	4.37
					30	41	1.63				
	8		2.68		30	42	1.59	1.63		2.68	4.37
					30	40	1.67				
	9		2.68		30	42	1.59	1.61		2.68	4.31
					30	41	1.63				
	10		2.68		30	43	1.56	1.56		2.68	4.18
					30	43	1.56				
	11		2.68		30	45	1.49	1.54		2.68	4.13
					30	42	1.59				
	12		2.68		30	45	1.49	1.52		2.68	4.07
					30	43	1.56				
	13		2.68		30	45	1.49	1.50		2.68	4.02
					30	44	1.52				
	14		2.66		30	46	1.46	1.48		2.66	3.94
					30	45	1.49				
	15	1.0	2.66		30	44	1.52	1.46		2.66	3.88
					30	45	1.49				



16	1,0	2.66	30	48	1.40	1.38		2.66	3.67	.85
			25	41	1.36					
17		2.66	25	42	1.33	1.34		2.66	3.56	.90
			25	41	1.36					
18		2.64	30	51	1.31	1.32		2.64	3.48	.92
			25	42	1.33					.94
19		2.62	25	43	1.30	1.28		2.62	3.35	
			25	44	1.27					.96
20		2.62	25	44	1.27	1.23		2.62	3.22	.97
			25	47	1.19					.98
21	1,0	2.62	25	46	1.22	1.20		2.62	3.14	.99
			25	48	1.17					
22	,80	2.62	20	41	1.09	1.13		2.10	2.37	
⊙			25	48	1.17					1.00
24	22,6	3 2.62	est	0.85	5	22.96		.286	.75	
	22,6	22.6						60.236	88,52	
										.99
			Lew	@	1115					.98
										.97
										.96
Utah-Salt Lake Canal										.94
										.92
5/24/05										.90
										.85
										.80

.0 .10 .20 .30 .40 .50 .60 .70 .75